Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 18-34 are pending in the application, with claims 18 and 31 being the independent claims. Claims 18, 21, 31, and 32 are amended herein to correct grammatical errors. The specification is amended to add appropriate headings and remove reference to the claims by number. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Objection to the Specification

The specification is objected to for referring to the claim numbers and for not having section headings. The specification is amended herein to remove reference to the claim numbers and to include section headings. Accordingly, Applicant respectfully requests that these objections be withdrawn.

Objection to the Claims

Claims 21, 31, and 32 are objected to for grammatical purposes. Claims 21, 31, and 32 are amended herein to correct the grammatical errors. Accordingly, Applicant respectfully request that these objections be withdrawn.

Rejections of claims 31-34

Claim 31 is rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 4,912,935 to Goldstein ("the Goldstein patent"). Claims 32-34 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over the Goldstein patent in view of U.S. Patent No. 4,249,388 to Burns ("the Burns patent"). Applicant respectfully traverses these rejections.

Independent Claim 31

The Goldstein patent fails to disclose the claimed invention. Independent claim 31 is directed to a system for tempering at least one packaged product unit utilizing an ice slurry comprising water and ice particles. The system comprises:

at least one treatment tank for submerging the at least one packaged product unit, wherein the at least one treatment tank comprises an upper part with an overflow trough;

at least one injection nozzle;

a pipe connecting the overflow trough and the at least one injection nozzle; and

a pump associated with the pipe for pumping ice slurry present in the overflow trough through the pipe and injecting the ice slurry back into the at least one treatment tank through the least one injection nozzle so as to circulate the ice slurry in the at least one treatment tank around the at least one packaged product unit in order to cool the at least one packaged product unit.

The Goldstein patent discloses an ice storage and distribution unit wherein a slurry of ice and brine is introduced into a vessel 12 from ice generating unit 18. Inside vessel 12 the ice and brine separate into an ice bed 17 and a liquid bath 19. Blades 32 at the top of vessel 12 rotate and scrape ice bed 17 to send ice particles into ice outlet 40. Brine may be pumped into the ice leaving ice outlet 40 and the solution may then be

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delivered to a desired location or circulated back into vessel 12. See col. 3, lines 11-39 and FIG. 1. However, since the slurry separates into an ice bed 17 and a liquid bath 19, it is not possible for an ice slurry to circulate in vessel 12 around a packaged product unit submerged in vessel 12. Further, a packaged product would be present in a liquid bath and not an ice slurry (mixture of liquid and ice). In addition, the system disclosed in the Goldstein patent is a closed system and there is no indication there are any openings in vessel 12 through which a packaged product may be inserted. Accordingly, there is no indication that vessel 12 is capable of containing a submerged packaged product unit. Therefore, the Goldstein patent cannot anticipate the claimed invention because it is not capable of performing the functional language.

For at least the above noted reasons, independent claim 31 and claims 32-34, which depend therefrom are allowable. Accordingly, Applicant respectfully requests that these rejections be reconsidered and withdrawn, and the claims allowed.

Dependent Claim 34

Dependent claim 34 recites "a rack on which the at least one packaged product unit hangs while submerged in the at least one treatment tank." In addition to the reasons note above with regard to claim 31, dependent claim 34 is also allowable for at least the following reason. One skilled in the art would have had no rationale at the time the invention was made to include a rack for hanging a packaged product while it is submerged because it would not be possible to continuously raise and lower the rack for loading and unloading a packaged product through ice bed 17 present at the top of vessel 12 in the system of the Goldstein patent. Accordingly, claim 34 is allowable and

Applicant respectfully requests that the rejection of claim 34 be reconsidered and withdrawn.

Rejections of claims 18-30

Claims 18, 20, 23, and 25-30 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over the Burns patent in view of the Goldstein patent. Claims 19, 21, 22, and 24 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over the Burns patent in view of the Goldstein patent and further in view of WO 99/21429 to Borup *et al.* ("the Borup publication"). Applicant respectfully traverses these rejections.

Independent claim 18 is directed to a method for tempering at least one packaged product unit in a treatment tank. The method comprises:

placing the at least one packaged product unit in the treatment tank;

introducing an ice slurry comprising water and ice particles into the treatment tank; and

circulating the ice slurry in the treatment tank around the at least one packaged product unit in order to cool the at least one packaged product unit, wherein the ice slurry present in an overflow trough located at an upper part of the treatment tank is pumped through a pipe connected to the overflow trough and injected back into the treatment tank through at least one injection nozzle.

The Burns patent and the Goldstein patent, either alone or in combination, fail to disclose or render obvious the claimed invention.

The Burns patent, as best seen in FIG. 1, is directed to an automatic liquid ice system wherein packages 22 are placed on a conveyor means 20 and liquid ice transported from a liquid ice machine 10 through conduit 18 and out an applicator 28 and

into packages 22 as packages 22 move past applicator 28 on conveyor means 20. Packages 22 contain food products such as vegetables, poultry, or fish and the liquid ice serves to refrigerate the food products during shipment. See col. 1, lines 4-7. The Burns patent fails to disclose or provide a rationale for placing a packaged product in a treatment tank, introducing an ice slurry into the treatment tank and circulating the ice slurry in the treatment tank around the packaged product unit in order to cool the packaged product unit, wherein the ice slurry present in an overflow trough located at an upper part of the treatment tank is pumped through a pipe connected to the overflow trough and injected back into the treatment tank through at least one injection nozzle.

The Goldstein patent fails to cure the deficiencies of the Burns patent. As discussed above, the Goldstein patent discloses an ice storage and distribution unit wherein a slurry of ice and brine is introduced into a vessel 12 wherein the ice and brine separate into an ice bed 17 and a liquid bath 19. Blades 32 at the top of vessel 12 rotate and scrape ice bed 17 to send ice particles into ice outlet 40, where the ice can then be delivered to a desired location or circulated back into vessel 12. See col. 3, lines 11-39 and FIG. 1. It would not have been obvious to one of ordinary skill in the art to modify the system disclosed in the Burns patent to utilize the unit of the Goldstein patent as suggested by the Examiner.

One of ordinary skill in the art would have had no rationale to modify the process of the Burns patent to place packages 22 in the ice storage and distribution unit of the Goldstein patent because the Burns patent does not place packages 22 in a treatment unit. Such a combination would be analogous to placing package 22 in liquid ice machine 10 of the Burns patent. There is no rationale to completely restructure the system of the

Burns patent so that conveyor 21 brings packages 22 to be filled with liquid ice through liquid ice machine 10 of the Burns patent or the ice storage and distribution unit disclosed in the Goldstein patent.

In addition, in the instance packages 22 disclosed in the Burns patent are considered to be the claimed treatment tank, one skilled in the art would have had no rationale to replace packages 22 with the ice storage and distribution unit disclosed in the Goldstein patent. Doing so would require an ice storage and distribution unit disclosed in the Goldstein patent to replace each package 22, which would unnecessarily complicate the process of the Burns patent and add substantial unnecessary expenses. Accordingly, the Examiner has failed to establish a prima facie case of obviousness.

For at least the reasons noted above, independent claim 18 and claims 19-30, which depend therefrom, are allowable. Accordingly, Applicant respectfully requests that these rejections be reconsidered and withdrawn, and the claims allowed.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will

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expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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